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THE PLANT DISEASE REPORTER

ISSUED BY

THE OFFICE OF MYCOLOGY AND DISEASE SURVEY

Volume XIII Number 4

July 1, 1929

BUREAU OF
PLANT INDUSTRY

UNITED STATES DEPARTMENT OF AGRICULTURE

THE PLANT DISEASE REPORTER

Issued by

THE OFFICE OF MYCOLOGY AND DISEASE SURVEY

Vol. XIII July 1, 1929 Number 4

OFFICE NOTES

REPORTS DUE BEFORE 12TH AND 27TH OF EACH MONTH

The following schedule of operations in connection with the preparation of the Plant Disease Reporter will show why it is necessary to have all information on hand for any particular number on or before the 12th and 27th of each month. This schedule is based on past experience with our present staff and facilities and makes allowances for other work that must be conducted at the same time.

12th 27th	noon	13th 28th	noon	14th 29th	noon	15th 30th	noon
Preparation							
		Cutting Stencils					
			Proof-reading				
				Mimeographing			
					Assembling		
						Stapling	
							Mailing Out
							Delivering
					Filing and Indexing		

ALUMINUM DRIERS

During the course of the survey in West Virginia last year the aluminum driers recommended by F. L. Stevens and manufactured at Urbana, Illinois, were found to be very useful as an aid in pressing specimens quickly and thoroughly. These driers are approximately the same size as the ordinary herbarium blotters (16 x 11 1/2 inches) and are very thin and light in weight (2 1/4 ounces each). They are corrugated with about two corrugations to the inch and look just like the business side of the old fashioned washboard which is fast disappearing from our modern homes. In fact they have the appearance of being made by the same machinery or process as employed in the manufacture of that time-honored accessory. These driers are used with an ordinary herbarium blotter or drier on either side of them in order to prevent crimping or "marceling" the specimens and are most effective when they are stood on edge over artificial heat. Being metal they absorb and hold the heat and being corrugated they permit a free circulation of air with the result that the specimens dry quickly and hold their color.

This note is written with the thought that some of the collaborators and others who are collecting may be enabled to obtain better dried specimens.

SUPPLEMENTS TO THE REPORTER

Supplement 68, Diseases of Vegetable and Field Crops (other than cereals) prepared by B. F. Dana was mailed out on May 15. The report of Peronospora effusa (Grev.) Ces. on carrot on page 87 should be removed and placed under spinach on page 92. This fungus does not occur on carrot.

Supplement 69, Plant Diseases in Montana in 1928 by P. A. Young, and Supplement 70, Diseases of Fruit and Nut Crops in the United States by R. J. Haskell are practically ready for distribution and will be mailed out within a few days.

FRUIT DISEASES

INSTANT BORDEAUX POPULAR IN VIRGINIA

It has been surprising how the Virginia and West Virginia growers have been adopting the new method of preparing Bordeaux from the powdered ingredients. Powdered bluestone known by the trade name "snow" is used with chemical hydrated lime. The proper amount of this bluestone is washed into the spray tank partly filled with water. With the agitator running, it is completely dissolved within two minutes or in less time than is usually required to fill the tank with water. When the tank is nearly full, the chemical hydrated lime is added in the form of a paste. This method is simple, quick and fool proof. It eliminates making stock solutions and especially the difficult job of properly slaking stone-lime. The Bordeaux resulting has a high suspension, is of a gelatinous consistency and contains no grit which is usually found when the slaked lime is not strained

through cheese cloth. The cost of the powdered bluestone is one-fourth of a cent per pound more than the crystals and the chemical hydrated lime sells for the same price as ordinary hydrated lime here in Winchester. The fungicidal properties of this new type of Bordeaux which we have named "instant Bordeaux" have been found to be very satisfactory in apple blotch control experiments. We are recommending a 2-4-50 Bordeaux in Virginia. (F. J. Schneiderhan)

MORE NOTES ON APPLE SCAB

Virginia: More prevalent in northern Virginia than in any of the past four years. The appearance of this disease is comparatively late this year. A case of extremely severe infection was noted in one Stayman orchard which had been dusted up to June 1. The infection on fruit in this orchard was estimated to be 80 per cent. Leaf infection was 95 per cent. An unusual feature of the leaf infection is the necrosis of the tissue infected. This gives the leaves the appearance of having been injured by spray material. Ordinarily in Virginia, scab lesions remain green or olivaceous and humped up but rarely turn brown except after heavy application of a fungicide, but this is not the case this year. Very likely considerable shot-holing will occur as a result of this characteristic of scab infection of leaves this year. (F. J. Schneiderhan)

Ohio: Very bad and general in state. The weather conditions have been very favorable for its spread and with timely sprays it seems almost impossible to hold it in check. (E. W. Mendenhall, June 10)

Illinois: Generally quite prevalent on all susceptible varieties of apples in southern part of state. Weather conditions prevented proper application of the earlier sprays in many orchards. Rather severe on all susceptible varieties. (G. L. Stout, June 19)

Nebraska: Worse this year than at any time during the past 15 years. As the disease is usually only of minor importance, many orchardists failed to spray with a fungicide, or because of weather conditions were unable to get into their orchards at the proper time. Such orchards are practically 100 per cent infected with leaves turning brown, drying up and falling and fruit heavily infected. Where sprays were properly applied the disease is fairly well under control. The weather conditions this spring have in general been very favorable to apple scab. (R. W. Goss, June 18)

APPLE BLOTCH

Virginia: First appeared on June 13. This disease is serious on Greenings and Ben Davis in poorly managed orchards. Limber Twig also is very susceptible but this is an uncommon variety in Virginia. (F. J. Schneiderhan, June 17)

Illinois: Generally quite prevalent on all susceptible varieties of apples in southern part of state. Weather conditions prevented proper application of the earlier sprays in many orchards. Duchess and Yellow Transparent are suffering particularly from heavy blotch infection. Jonathan, Yellow Transparent and some other especially susceptible apple varieties seem to be showing much more blight infection than usual. (G. L. Stout, June 19)

BENEFIT FROM CEDAR ERADICATION EVIDENT IN VIRGINIA

We have had sixteen years of experience in the eradication of the alternate host of an economically important fungous parasite in Virginia. We refer to the large scale eradication of the cedar trees in Virginia. A wisely written and rigidly enforced state law no doubt was the most important factor in this eradication of the red cedar in Virginia and saved the apple industry of this state which ranks third in production of apples in the United States. In the northern end of the Valley of Virginia where hundreds of thousands of cedars have been cut, cedar rust is no longer a disease of any importance. In districts bordering on uncut cedar areas this disease is the limiting factor in the production of cedar rust susceptible varieties like York Imperial, Ben Davis and Rome Beauty. There will be an opportunity for plant pathologists motoring to the summer meetings in North Carolina to traverse the historic old Valley Pike through Virginia where the results of eradication and non-eradication of cedar trees can be seen along the way. To those who contemplate this trip this summer we wish to suggest an examination of York Imperial foliage in the Winchester section and compare the results with similar examinations made in orchards within the battle field of Cedar Creek about twenty miles south of Winchester. We feel sure that we have here an example of disease control that will register a real kick to a plant pathologist's pride of profession. (F. J. Schneiderhan)

APPLE RUSSETING IN VIRGINIA

An unusual amount of russeting of Stayman has been found and has been reported in the Winchester section. This variety is comparatively free from this type of injury in average years, the Ben Davis and Grimes varieties being much more susceptible to it. This russeting is due partly to weather factors. In fact it becomes increasingly evident that weather conditions are responsible for more of this fruit injury than we suspected in past years. Unsprayed trees of Ben Davis and Stayman show considerable russeting. The spray injury problem is a by-product of the heavy spray application now being made in the Shenandoah Valley apple district. It is more important in the best managed orchards for reasons that are evident. We are devoting considerable time to a study of spray injury and are pleased to report that of the sulfur fungicides, the newly developed calcium sulphide is the least caustic. This new fungicide is the most promising of many tried during the past five years. (F. J. Schneiderhan, June 17)

NOTES ON BLIGHT OF APPLES AND PEARS

Kentucky: Has been very severe this year in apples causing blossom blight and twig blight. In one orchard in Johnson County where most of the blight appeared to have originated as blossom blight and then spread back into twigs the relative resistance as indicated by twig blighting was about as follows:

Very severely injured	Severe
Smith Cider	Rome Beauty (usually resistant in this orchard)
Maiden Blush	
Gravenstein	
Pewaukee	
Duchess	

Slight	Slight or none
Delicious	Winesap (heavy crop set)
Golden Delicious	Champion
Yellow Transparent (old trees slow growing)	
Senator (only blossoms killed)	

Blight had been cut out of pears for several years in this orchard and the pears came through with a full set of fruit and only a few blighted twigs. A source of hold-over cankers was found about 1/4 mile away. The pears bloomed during a hot dry period ahead of the apples which bloomed over a long cool wet period. (W. D. Valleau, June 18)

Illinois: Very severe on pears, infection often running as high as 50 to 80 per cent of the spurs. (G. L. Stout, June 19)

Nebraska: Quite common. The weather conditions this spring have been very favorable to such diseases as apple scab, fire blight, and many leaf spot diseases. (R. W. Goss, June 18)

PROXIMITY OF POTATOES THOUGHT TO INCREASE INCIDENCE OF PEACH YELLOWS IN KENTUCKY

Last year I reported the presence of peach yellows in the Kentucky Experiment Station orchards and suggested that the disease had originated in some other plant grown nearby, the potato being the most probable source. In the last few days I have traveled by auto up the Big Sandy River in the mountains of eastern Kentucky. This region is thickly populated in the valleys, each family occupying a small area of land, the houses generally being placed near a garden spot. Potatoes are grown in the gardens year after year. A few peach trees usually border the garden, or a small planting may be set near the garden. Thus an excellent opportunity is given to test the potato theory of the origin of peach

yellows. If potatoes were the source of yellows, it would be expected that yellows would practically always be found in peach trees growing near potatoes, whereas if no relation existed, healthy trees should be found near the gardens. Also peach trees growing at a distance from gardens should be free from yellows and should remain free.

In traveling from Paintsville, in the mountain section, to Winchester in the Bluegrass section, a distance of about 180 miles, numerous garden plots in which potatoes are regularly grown and which are bordered by peach trees, were observed. Twenty-eight were carefully observed. In each of these peach yellows was found in advanced stages. In many gardens observed from the road in passing, peach trees were seen which appeared to have typical symptoms of yellows. One commercial planting within three or four hundred yards of yellowed trees and potato plantings, but located high on the side of a hill and protected from the gardens by a growth of tall trees, has remained free of yellows for 16 years. Another planting located on a plateau and away from garden plots, has remained free for about the same period. Yellows has not yet been reported in a commercial planting in Kentucky. The orchards are usually located in areas not fitted for interplanting with potatoes.

The evidence thus far obtained indicates a definite relation between peaches growing in or near gardens and the presence of peach yellows, and the absence of yellows in plantings removed from garden plots; with the potato the most probable source of the virus. (W. D. Valleau, June 17)

REPORT ON ZINC SULPHATE SPRAY AS A CONTROL FOR BACTERIAL SPOT OF PEACH IN NORTH CAROLINA

A noticeable improvement in both fruit and trees has resulted this year in North Carolina orchards where zinc sulphate has been applied as recommended by Dr. J. W. Roberts for the control of the peach bacterial fruit and leaf spot. During the past ten days examination has been made in four orchards where the material has been used, and while the control is not complete, there is a noticeable freedom from infection of both fruit and leaves as compared to unsprayed rows. Growers are using the material in some instances in combination with lead arsenate and spreader so far with no ill effects. A heavy infection has resulted in unsprayed orchards as a result of frequent rains during May and June. (G. W. Fant, June 17)

BACTERIAL SPOT OF PEACH IN VIRGINIA

This disease is general on peach foliage in northern Virginia. It is more prevalent than at any time in the history of peach growing in this state. Severe defoliation and shot-holing has been found near Winchester, but to date, June 17, no fruit infection has been seen. It is the commonest peach disease in this state to date. (F. J. Schneiderhan)

PEACH ROSETTE OCCURS IN OKLAHOMA

I have just identified a specimen of peach disease sent in from Woodward, Oklahoma, as a very typical, striking specimen of peach rosette. The typical or extreme character of the specimen, and Mr. Locke's statements that the tree is covered with rosettes of leaves and that the entire tree looks like the specimen, helps in the identification. As far as I can determine this is the farthest west in Oklahoma or elsewhere that this disease has been recorded. Since this is on the pedocal soils on which the physiological western rosette occurs the question naturally comes up as to whether this might not be physiological, soil trouble, but the uniformity of the rosetted twig tips on this striking specimen rather definitely distinguishes it from the western peach rosette or chlorosis. (M.B. Waite, June 14)

CHERRY LEAF SPOT (COCCOMYCES HIEMALIS)

Ohio: Over the northern half of the state, this disease gives promise of becoming very severe. The first infection occurred early and took place in many orchards before the first spray was applied. The ascosporic infection was much heavier than is usually the case with this disease. (C. W. Bennett, June 12)

Illinois: Apparently there will be considerable defoliation of cherries this year following an epidemic of leaf spot which is infecting the trees of the entire southern half of the state. (G. L. Stout, June 19)

Nebraska: Again very severe. In unsprayed orchards about 60 per cent of the leaves are already heavily infected, with extensive yellowing and leaf dropping. In some orchards where dry lime-sulfur was used, as high as 40 per cent infection is found even after two spray applications. This disease was also severe in 1927. (R. W. Goss, June 18)

LOUISIANA STRAWBERRY DISEASES

C. W. Edgerton has recently sent in the following report dated June 11. Since Louisiana ranks high as a strawberry producing state this report is of especial interest.

Leaf spot (Mycosphaerella fragariae)

Infection about the same as usual. Spraying experiments carried on at Hammond using 4-4-50 Bordeaux gave excellent results in spite of the heavy rainfall. Plants sprayed six times were nearly free of the leaf spot and made nearly twice the growth of unsprayed ones. Three sprayings were not sufficient to control the disease.

Scorch (Diplocarpon earliana)

Infection about the same as usual. Spraying experiments with Bordeaux mixture gave good control.

Dwarf (undet.)

Infection same as usual, common in the whole strawberry district. Dwarf symptoms are not as prominent during the growing season as at other times.

Growth failure

The failure of the plants to grow satisfactorily is common especially in the older sections of the strawberry district. A species of Pythium has been isolated by A. G. Plakidas which rots the roots and checks the growth of the plants. Its importance under field conditions has not as yet been determined. The Mycorhiza fungus which has been reported in other sections was also found here.

Fruit rots

Very little rotting of the fruit during the picking season. A hot spell during the early part of the season, however, resulted in soft berries for a period and materially reduced the crop, as well as causing a drop in the price.

RASPBERRY ANTHRACNOSE SEVERE IN OHIO

This disease is unusually severe in Ohio. A heavy infection took place on the lower parts of the new canes and on the fruiting shoots. Very little infection occurred on the fruit pedicels. If the weather is dry before and during the harvest period we expect considerable reduction in yield due to the spotting of the fruiting shoots. (C. W. Bennett, June 12)

FROST MARKS RASPBERRY FOLIAGE IN OHIO

Frost marks on the foliage of all kinds of raspberries is more prevalent than usual. The white markings along the veins are abundant on most of the plants. In addition to this symptom, many of the leaves exhibit a blistered or puckered condition which resembles to a considerable degree, certain types of mosaic mottling. (C. W. Bennett, June 12)

SOUR ROT OF FLORIDA ORANGES

According to L. F. Butler (U.S.D.A. Fruit and Veg. Div. Letter, June 14, 1929) several inspections of Florida oranges on the New York market have shown a high percentage of decay at the blossom ends of the fruit. Laboratory studies have revealed the presence of a fungus similar to the one causing sour rot of

California lemons (Oospora citri-aurantii). The incidence of disease seemed to be correlated with the maturity of the fruit those in an advanced stage of maturity showing the highest percentages. A description of the symptoms is given.

DISEASES OF CEREALS

DISEASES OF CORN IN FLORIDA

According to reports received from Eddins, June 20: Leaf blight (Helminthosporium turcicum) is generally present but of little importance. Brown spot (Physoderma zeae-maydis) caused a 20 per cent infection at the Experiment Station Farm. Rust (Puccinia sorghi) a light infection seen in all fields but is confined to lower leaves. Smut (Ustilago zeae) shows the average 4 per cent infection.

DISEASES OF OATS

Smuts (Ustilago avenae and U. levis)

Illinois: Smut is heavy as usual, running up to 10 per cent. (G. L. Stout, June 19)

Arkansas: Smut on untreated spring oats is unusually abundant. We figured the infection to be 15 to 20 per cent. Oats treated with formaldehyde show almost complete freedom from smut. (H. R. Rosen, June 13)

South Carolina: The smut epidemic of 1927 has caused seed treatment to be the rule rather than the exception and the losses in the state this year are small (3-5 per cent). A 10-acre field in Richland County showed 24.5 per cent. (G. M. Armstrong, June 13)

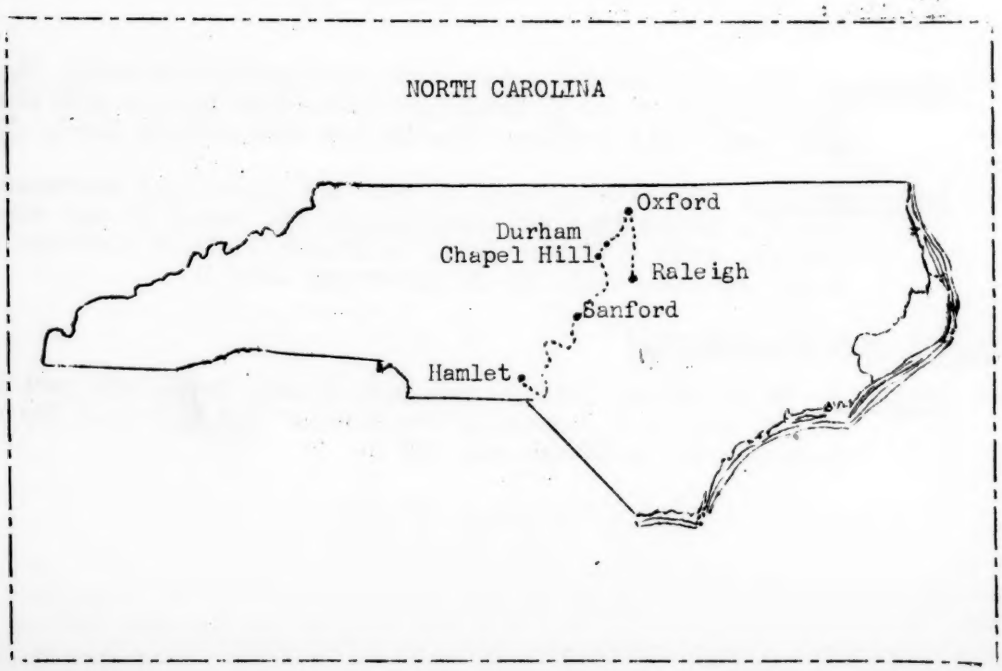
Crown rust (Puccinia coronata)

Illinois: There is very little crown rust on oats in central part of state as yet, but it is reasonably abundant in many fields in the southern counties. (G. L. Stout, June 19)

South Carolina: Losses for lower half of state probably 10 per cent. Nearly every field planted to Fulghum oats. (G. M. Armstrong, June 1)

NOTICES

The accompanying map shows the proposed route of the summer meeting and tour of the American Phytopathological Society and its Southern Division, July 29-31. Some of the diseases that will be seen, and for some of which control demonstrations are being arranged, are bacterial spot, root knot and die-back of peach; bacterial wilt, leaf spot, root knot, mosaic and non-parasitic diseases of tobacco; scurf and stem rot of sweet potatoes; cotton wilt and other troubles; and apple diseases. On account of weather conditions this spring, many of these diseases are very prevalent.



WHEAT DISEASES IN ILLINOIS

Leaf rust (Puccinia triticina) on wheat seems to be rather abundant toward the southern part of the state and increases in intensity toward the south. Wheat is in the dough stage in the southern counties and will probably be cut within the next ten days, at least in the extreme south. Stem rust (P. graminis) was found but twice on wheat and then only just a trace on a few culms. Stinking smut was found infecting about 5 per cent of the heads in a 28-acre field in Wabash County, and again in Washington County affecting 1 per cent of the heads. No stinking smut (Tilletia spp.) was found in a large number of other fields examined. Scab (Gibberella saubinetii) infection varies from 1 to 2.5 per cent of the heads and, as would be expected, is most severe in the southern counties where the wheat is nearer to maturity. Anthracnose (Colletotrichum graminicolum) is present in every field and commonly on 100 per cent of the culms, but appears to be causing no damage. Usually it is present only on the basal leaf sheaths or on the lower nodes. As usual, the speckled leaf blotch (Septoria tritici) is present in every field and on the lower two to four leaves of practically every plant. The usual slight infections by basal glume rot (Bacterium atrofaciens) are present in most fields along with usually less than 1 per cent of loose smut (Ustilago tritici). Some fields which are poorly drained or pretty well water soaked are rather heavily infected with glume blotch (Septoria nodorum). Anthracnose is also unusually intense in such fields. (G. L. Stout, June 19).

PERFECT STAGE OF HELMINTHOSPORIUM SATIVUM

In view of the importance of Helminthosporium sativum as the cause of severe damage to cereals, it will be of interest to note that the perfect stage, Ophiobolus sativus (P. K. & B.) Ito and Kuribayaski, has been described (Kuribayashi, Kazue - The ascigerous stage of Helminthosporium sativum. Trans. Sapporo Nat. Hist. Soc. 10 (2): 138-145. 1929. English abstract with description, pp. 143-144.) Asci were developed in culture from conidia. Conidia produced in culture from single ascospores were used in successful inoculations on barley and wheat.

CRINKLE-JOINT OF WHEAT IN NORTH DAKOTA

Considerable damage in wheat and rye has been reported as due to this trouble. The straw breaks between nodes soon after tillering, causing a type of lodging. Growth continues causing a right-angle bend in the straw at the first node above the break. Growers often believe the trouble due to hail, although "crinkle-joint" often develops when hail is known not to be the cause. (W. E. Brentzel, June 24).

DISEASES OF VEGETABLES

UNUSUAL REPORTS OF POTATO LATE BLIGHT

Reports of the occurrence of Phytophthora infestans on potatoes have been received from Louisiana and Arkansas this year. Late blight is unusual in both states. Armstrong and Moore report the severest outbreak in recent years in South Carolina.

South Carolina: Severest outbreak within recent years. All fields throughout potato section were attacked. Loss estimated at 10 per cent.

One farm, 492 acres on Edisto Island loss of 40 per cent of crop at time of visit, April 24. (June 12).

Georgia: Specimen received by Dr. Weiss from J. L. Budreau and Co., Savannah, May 1.

Louisiana: A severe infection in some fields at Baton Rouge reducing the crop about 25 per cent. Late blight in Louisiana is unusual. (C. W. Edgerton, June 11).

Arkansas: For the first time in quite a few years we have found late blight of Irish potatoes in this state. Diseased material was sent in from Ozark, Arkansas with the statement that three-fourths of the patch was affected. (H. R. Rosen, June 13).

POTATO DISEASES IN SOUTH CAROLINA AND LOUISIANA

South Carolina: The lack of any serious losses from the virus diseases was particularly noticeable when on a visit to the commercial potato sections in the coastal counties. The use of certified seed was very general. Losses negligible.

Rhizoctonia general throughout state. Stands not materially affected although yields were reduced from 10 to 20 per cent where seed was not treated. Loss to potato section about 12 per cent.

Bacterium solanacearum - 10 per cent loss in 20-acre field near Orangeburg, May 14; 5 per cent loss in 6-acre field in Florence County; 1/2 of 1 per cent - 15-acre field Calleton County. Only reports.

Actinomyces scabies - Severely diseased specimens from one grower in Hampton County who reports his losses as $1,000.00. No other reports have been received. I saw little scab in visits to about 12 fields in Allendale and Hampton Counties May 27 and 28. (G. M. Armstrong, June 13).

Louisiana: Early blight (Alternaria solani) quite severe in certain sections. Hopper burn more than usual. Materially reduced the crop. Not as much mosaic as usual on account of the general use of certified seed. (C. W. Edgerton, June 11).

POTATO BLACKHEART (NON-PAR.) IN MAINE

Following several exceptionally hot days at the end of May, specimens of blackheart tubers were received from several places. The trouble was attributed to high respiration due to sprouting and the continuous high temperature, resulting in a shortage of oxygen in the center of the tubers, most of which were rather large (6 to 16 oz.). In the past, we have found that similar conditions would affect whole tubers but not split tubers in the same container. (Folsom, June 17).

BEAN DISEASES SEVERE IN THE SOUTH

Anthracnose (Colletotrichum lindemuthianum)

South Carolina: In epidemic proportions, Allendale, Hampton, Calleton, Clarendon, and Georgetown Counties. Visits not made to other counties but reports indicate that disease also widespread in Orangeburg and Williamsburg. Loss in trucking regions fully 35 per cent. Losses from all bean diseases have been severe. Dr. Moore and I from various trips of inspection believe the losses to be nearly 50 per cent of the crop. (G. M. Armstrong, June 13).

Louisiana: A much heavier infection than usual. On some days, as high as 25 per cent of the beans were refused for shipment. (C. W. Edgerton, June 11).

Halo blight (Bacterium medicaginis phaseolicola)

South Carolina: Widespread in Allendale, Hampton, Jasper, Beaufort and Charleston Counties which were visited by Dr. W. D. Moore or myself, also present at Clemson College. Loss in Beaufort and Charleston probably 10 per cent. Other sections visited when infections on leaves in early stages. Loss in variety test at Clemson College, 30 per cent. (G. M. Armstrong, June 13).

Bacterial blight (Bacterium phaseoli)

South Carolina: Noted in epidemic proportions in Williamsburg and Florence Counties on May 10. Losses in this bean growing area 35 per cent. Situation nearly as bad in Beaufort, Charleston, Georgetown and Horry Counties. Widely prevalent though damage not severe in Allendale and Hampton Counties, May 27. Loss for state about 10 per cent. (G. M. Armstrong, June 13).

Louisiana: Heavy infection as usual. (C. W. Edgerton, June 11).

Sclerotium rolfsii

Louisiana: A heavier infection than usual during the hot weather early in the season. (C. W. Edgerton, June 11).

SOME OTHER DISEASES OF VEGETABLE CROPS REPORTED FROM SOUTHERN STATES

CABBAGE

Black rot (Bacterium campestre). Louisiana: A very heavy infection early in the season. Many fields entirely ruined. Seed treating experiments at Baton Rouge with corrosive sublimate gave almost complete control. (C. W. Edgerton, June 11). Texas: Epidemic in south Texas, 20 per cent loss. (J. J. Taubenhaus, June 18).

Leaf spot (Bacterium sp.). Louisiana: A severe infection. Occurred along with black rot. (C. W. Edgerton, June 11).

COLLARDS

Club root (Plasmodiophora brassicae). G. M. Armstrong received a specimen of club root of collards from Lake City, South Carolina. The Survey has no other report of the occurrence of this disease on collards in the state, although it has been reported several times on cabbage.

SUGAR BEETS

Sclerotium rolfsii in Louisiana. An extremely heavy infection, some fields showing more than 50 per cent rot. The rot was favored by the hot weather early in the season. (Edgerton, June 11).

GREEN PEAS

Fungous and bacterial root rots in South Carolina. General throughout trucking area. Infection practically 100 per cent. Loss 10 to 20 per cent. (Armstrong and Moore, June 12).

LETTUCE

Tip burn very severe in the lower Rio Grande Valley and in the vicinity of Laredo, Texas. Ten per cent loss. (Taubenhaus, June 18).

DISEASES OF HERBACEOUS ORNAMENTALS

SCORCH OF VINCA MINOR

Scorch or wilt of Vinca minor, apparently caused by Phomopsis lirella Grove, produced considerable damage to border plantings in a garden in Washington, D. C. Last year the disease appeared only in a local area, this year the entire planting was affected.

A scorched and wilted appearance are the first evidences of the disease. Later, pycnidial bodies may be found on the basal part of the grey dead stems.

Stewart (Bul. N. Y. Agr. Exp. Sta. Geneva, 328:396. 1910) reported in 1910 an undetermined Phoma that had caused some loss of young Vinca plants in two greenhouses in the state. His description of the external symptoms of the disease correspond with those of the diseased plants reported on above. (G. Hamilton Martin, June 25).

NEMATODE OF PHLOX

On June 19, Dr. B. O. Dodge reported a severe infestation of phlox by Tylenchus dipsaci. Several hundred phlox in Compo Hill Parkway, Westport, Connecticut were said to be affected. The report was sent with specimens to Dr. G. Steiner who confirmed the identification of the organism.

SPECIMENS RECEIVED

Ascochyta althaeina Sacc. & Bizz., leaf spot, on Althaea rosea. Washington, D. C. received from C. A. Ludwig, June 19. Det. by G. Hamilton Martin and R. J. Haskell. First report to Plant Disease Survey from District of Columbia.

Cercospora althaeina Sacc., leaf spot, on Althaea rosae. Washington, D. C. received from C. A. Ludwig, June 19. Det. by G. Hamilton Martin and R. J. Haskell. First report to Plant Disease Survey from District of Columbia.

Cercosporella cana Sacc., leaf spot on Erigeron annuus. Washington, D. C. June 20. Coll. and det. by G. Hamilton Martin.

Cladosporium sp. on Aquilegia sp., New York City and New Brunswick, New Jersey, Washington, D. C. Coll. and det. by G. Hamilton Martin. First report from any state to Plant Disease Survey.

Marssonina aquilegiae (Rbh.) Rostr.) leaf spot on Aquilegia sp., New York, New Jersey, District of Columbia and Maryland. June. Coll. and det. by G. Hamilton Martin. First reports for New York, District of Columbia and Maryland to Plant Disease Survey.

Puccinia cyani (Schl.) Pass., rust, on Centaurea cyanus. Cape May Court House, New Jersey received from R. P. White, June 21. Det. by G. Hamilton Martin.

Sporotrichum poae Pk. (S. anthophilum Pk.) bud-rot, on Dianthus caryophyllus, Mountaindale, Pennsylvania received from C. D. Youngkin, April 30. Determined by Freeman Weiss.

Vermicularia trichella Fr. on Hedera helix. Louisville, Kentucky received from P. A. Davis, June 17. Determined by G. Hamilton Martin. First report this state to Plant Disease Survey.

Taphrina filicina Rostr. on Polystichum acrostichoides. York Village, Maine received from W. T. Councilman, June 18. Determined by R. Davidson.

DISEASES OF TREES AND SHRUBS

ANTHRACNOSE DISEASE OF EUROPEAN LINDEN

A specimen of European linden has recently been received from Hempstead, Long Island severely affected with Gloeosporium tiliae Aud. The tree, Tilia cordata is a very large one and the sender of the specimens says it has been affected in this manner once or twice before. The tree is about eighteen years old. The lesions are very characteristic. They occur along the veins in various parts of the leaf blade but mostly toward the tip of the blade. The spot is elongate, light brown, with a very striking narrow black band between the necrotic area and the healthy leaf tissue. The sender of the specimen reports that the tree is being rapidly defoliated. The specimens have been carefully compared with Krieger's Fungi Saxonici No. 1149A. Both the lesions and the spores of our specimen correspond exactly with Krieger's specimen. Cooperators in the plant disease survey are urged to be on the lookout for this disease on European linden and to send in specimens of any suspected cases of this disease, either to the writer or to Dr. Haskell. (H. H. Whetzel, June 22).

WILLOW SCAB

The first response to our recent request for more information on willow scab (Plant Disease Reporter 13: 44-45. June 15) was from Walter H. Snell of the New York State Conservation Department, Albany, who sent in typical specimens with the following notation:

> "I found this material on the road from the top of Jacob's Ladder to Lee, Massachusetts. A great deal of this type of trouble was noticed in that distance. I also noticed a large number of very large willow trees dead along the roadsides. From Lenox, Massachusetts to the State line, I noticed less of the trouble.
>
> "In a few days of wandering over the Adirondacks, chiefly along the Lake George-Plattsburg road, I have seen none of such damage to willows"

BLACK SPOT OF ELM

In Maine, according to Donald Folsom (June 17) defoliation from Gnomonia ulmea was occurring much earlier than usual. He also noted that there was a mosaic-like mottling which is not included in the available descriptions.

SPECIMENS RECEIVED

Cucurbitaria occullata Oudem., on Syringa vulgaris Washington, D. C. May. Coll. and det. by G. Hamilton Martin. First report for the United States to Plant Disease Survey.

Cladosporium vincae Fairman on Vinca minor, Washington, D. C. June 14. Coll. and det. by G. Hamilton Martin. First report for United States to the Plant Disease Survey.

Cladosporium sp. on Wisteria sp. Washington, D. C., May 24. Coll. and det. by G. Hamilton Martin. First report from any state to the Plant Disease Survey.

Microstroma juglandis (Bereng.) Sacc., leaf-spot on Hicoria sp., Washington, D. C. received from R. J. Haskell, May 24. Det. by G. Hamilton Martin. On Juglans cinerea, Washington, D. C. June 16. Coll. and det. by G. Hamilton Martin.

Dothichiza populea Sacc. & Br., canker on Populus sp. New York received from W. H. Rankin, June 17. Det. by W. A. Archer and R. J. Haskell.